Date	15th Nov 2022
Team ID	PNT2022TMID16091
Project Name	Smart Waste Management System for metropolitan cites.
Maximum Marks	4 Marks

FUNCTIONAL REQUIREMENTS

Objectives:

The main objective of the smart waste management is to develop a new typeof waste management system for the government and individual to manage waste in a proper way and disposed safely with usage of multiple modern developed web based user management and IOT devices based on the garbage bins. this project we're aimed to develop a smart waste bin in cost effective manner.

Focus:

Here, we're using ultrasonic sensor to detect the level waste in the bin which is connected to a microcontroller. Once the level of the bin attains a certain threshold limit, the GSM will notify the central hub. The central hub has been notified by GSM, it will glow the LED which makes the workers to understand that the bin has attained the maximum limit

Detailed bin inventory:

All monitored bins and stands can be seen on the map, and you can visit them at any time via the Street View feature from Google. Bins or stands are visible on the map as green, orange or red circles. You can see bin details in the Dashboard – capacity, waste type, last measurement, GPS location and collection schedule or pick recognition

Real time bin monitoring:

The Dashboard displays real-time data on fill-levels of bins monitored by smart sensors. In addition to the % of fill-level, based on the historical data, the tool predicts when the bin will become full, one of the functionalities that are not included even in the best waste management software. Sensors recognize picks as well; so you can check when the bin was last collected. With real-time data and predictions, you can eliminate the overflowing bins and stop collecting half-empty ones

Eliminate inefficient picks:

Eliminate the collection of half-empty bins.The sensors recognize picks. By using real-time data on fill-levels and pick recognition, we can show you how full the bins you collect are.